Abstract of the Disclosure

A method of extracting a tomographic image of a layer within a body by optical

coherence tomography, involves capturing three images, namely a non-interference

background image, a first interference-fringe image of said layer, and a second

5   interference-fringe image phase-shifted relative to the first interference-fringe image. The

tomographic image is obtained by mathematically combining the three captured images.

In a preferred embodiment random noise is removed by averaging and inter-layer effects

are removed by applying a compensation function. This system is then used to extract the

2D cross-sectional images encoded in a multiple-layer information carrier.